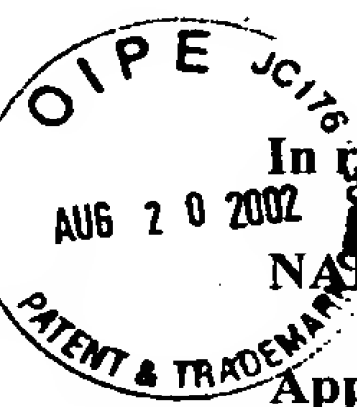


1631

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Patent Application of

NAKAE *et al.*

Application Number: 09/527,440

Filed March 17, 2000

For: PRIMER DESIGN SYSTEM

Honorable Assistant Commissioner
for Patents
Washington, D.C. 20231

Art Unit 1631

Examiner J. Lundgren

RECEIVED
AUG 22 2002
TECH CENTER 1600/2900

COVER LETTER

Sir:

[] The fee for submission of additional claims is calculated as shown below:

FOR	TOTAL WITH NEW CLAIMS ADDED	TOTAL CURRENTLY ON FILE	CLAIMS PAID	RATE	CALCULATION
Total Claims	18	17	-XX (Over 20)	x \$18	0
Independent Claims	7	10	10 (Over 3)	x \$84	0
MULTIPLE DEPENDENT CLAIM(S)				+ \$280	0
REDUCTION FOR FILING BY SMALL ENTITY (note 37 C.F.R. §§ 1.9, 1.27, 1.28).				x 1/2	
				TOTAL	0

In addition, the below-identified communications are submitted in the above-captioned application or proceeding:

- ☒ Response to Office Action
(with Claim Amendments)
- ☐ Information Disclosure Statement
- ☐ Preliminary Amendment
- ☐ Substitute Specification
- ☐ Other _____

- ☐ Petition for Extension of Time
- ☐ Terminal Disclaimer
- ☐ Letter to Draftsperson
- ☐ Assignment
- ☐ Petition under _____
- ☐ Small entity status

- [] Please charge my **Deposit Account Number** _____ in the amount of _____ to cover the fees for _
_____. A duplicate copy of this paper is enclosed.
- [] A check in the amount of \$ 0.00 to cover the fee is enclosed.
- [x] The Commissioner is hereby authorized to charge any additional fees associated with this communication,
including patent application filing fees and processing fees under 37 C.F.R. § 1.16 and 1.17, or credit any
overpayment to **Deposit Account Number 08-1480**.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344


Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

August 20, 2002

A circular stamp from the Office of Intellectual Property (OIP). The text "OIP" is at the top, "JG176" is at the top right, "AUG 20 2002" is in the center, and "PATENT & TRADEMARK" is at the bottom. There is a small mark on the right side of the stamp.

NAKAE *et al.*

Filed March 17, 2000

For: PRIMER DESIGN SYSTEM

Art Unit 1631

Examiner Clow, Lori A

18/F
RF/NE
E William
8-28-02

TP
12/19/02

Sir:

This is in response to the office action dated May 20, 2002, in the above identified application, the period for response to which has been extended to expire on August 20, 2002 with a continuation-in-part application filed concurrently. Please amend the above identified application with the replacement paragraphs/sections/claims as follows:

Please cancel claims 7, ~~19~~, 20, 22, and substitute claims 1-4, 30-32 with the following amended claims:

1. A primer design system, comprising:
- means for selecting at least one genomic DNA nucleotide sequence from a database including a plurality of DNA nucleotide sequences;
 - means for predicting a plurality of exons of said selected DNA nucleotide and for storing positions of the predicted exons;
 - means for simultaneously designing a plurality of primer pairs by using each of the predicted exons as a template; and
 - means for automatically collating said plurality of primer pairs with said predicted exons and the DNA nucleotide sequence.

2. A primer design system according to claim 1, further comprising means for selecting a plurality of primer pairs meeting certain selection conditions from the designed primer pairs.